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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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William Walsh

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7590

05/03/2005

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Patent Docket Administration
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EXAMINER

HABTE, ZEWDU

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,177

Applicant(s)

WALSH ET AL.

Examiner

Zewdu Habte

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-15, 18-25, 28-35, 38-45 and 48-50 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 16, 17, 26, 27, 36, 37, 46 and 47 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/14/2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 10-14, 20-24, 30-34, 40-44 and 50 are rejected under 35 U.S.C. 102(b) as being unpatentable by Liebowitz et al. (US 6366761 B1).

As to claims 1, 11, 21, 31 and 41, Liebowitz discloses a user access device depicted as terminal 12 [terminal apparatus] in Fig. 2 to receive and transmit voice, video and data over a satellite [abst., lines 3-6], comprising:

terminal 12, includes a modem 54 [user interface] illustrated in Fig. 5, tuned [configured] to the carrier to receive all bursts transmitted onto the carrier [col. 6, lines 63-67];

fragment assembler/disassembler, FAD 66 [classification logic] connected with modem 54 as illustrated in Fig. 3, assembles the received data fragments into frames where the fragments belong [col. 7, lines 45-48], and the address for each frame is analyzed to determine the communication ports 40 [col. 7, lines 54-56]; as illustrated in Fig. 2 a terminal 12 provides video 30 (real time traffic), PBX 28 (low-volume real time traffic), Ethernet LAN (high volume bursty traffic) connection to ports 40 (a plurality of transport services)]; and

once the address of each frame is analyzed by FAD 66, frames get forwarded to the frame handler module, FHM 64 [mapping logic] [col. 7, lines 56-58], and the FHM 64 using priority queuing [a plurality of packet delivery services] transmits the frame to the appropriate port 40 [col. 7, lines 60-65].

As to claims 2, 12, 22, 32 and 42, Liebowitz discloses that a header in the TDMA overhead bytes 116 in Fig. 7A, includes a terminal identifier [col. 7, lines 31-34]; and the FAD 66 performs a table lookup operation to determine sending terminal 12 [source address (at least one address, **the implication being more than one address**)] is in the same group as receiving terminal 12 [col. 7, lines 36-39], and Liebowitz teaches that each frame contains an address, and the address is analyzed to determine [types of service being analyzed] if it is associated with one of the communication ports 40 [col. 7, lines 51-56], as illustrated in Fig. 2, each port is associated with different types of services.

As to claims 3, 13, 23, 33 and 43, Liebowitz discloses in Fig. 2, a terminal 12 that is connected to a PBX 28 that exhibits a constant traffic pattern, an Ethernet LAN 24 that is a bursty traffic pattern, and a Frame Relay 20, a bursty traffic with a PBX 28 that is a constant traffic pattern.

As to claims 4, 14, 24, 34 and 44, Liebowitz discloses in Fig. 2, a terminal 12 that is connected to give service with Video camera 30 that requires a constant rate service for a real time situation such as video conferencing; terminal 12 is connected to give service over Ethernet LAN 24 that requires a combination of services; exchanging text messages between two computers require constant rate service and browsing a web

Art Unit: 2661

site requires bursty rate services; an ATM 34 requires a real time connection and high volume service; and a telephone connected to a PBX 28 requires low latency (real time conversation) and low volume service.

As to claims 10, 20, 30, 40 and 50, Liebowitz teaches when the FAD 66 analyzes the frame to determine if it is associated with one of the communications port 40 [col. 7, lines 54-56]. The frame payload is video, the default service is real time transport service since video is time sensitive [default transport service].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negative by the manner in which the invention was made.

4. Claims 5, 8, 9, 15, 18, 19, 25, 28, 29, 35, 38, 39, 45, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebowitz as applied to claim 11 above, and in view of Heath (US 6842437 B1).

As to claims 5, 15, 25, 35 and 45, Liebowitz discloses wherein the packet delivery services include rate access for establishing a constant rate communication channel [col. 2, lines 9-10, real time transmission (constant rate accessing)], volume access for establishing a bandwidth-on-demand communication channel [col. 2, lines 11-13, users can order low bit rate services...(bandwidth-on-demand)], but Liebowitz does not specifically disclose a contention access for establishing a contention

Art Unit: 2661

communication channel. Heath teaches that terminals dynamically use the uplink channels as a contention channel. It would have been obvious to a person of ordinary skill at the time of the invention to combine Liebowitz's packet delivery services with Heath's contention channel service in order to have an apparatus that comprises a packet delivery service that includes a contention channel accessing service. The motivation is to manage bandwidth by allowing contention when there is unused bandwidth assignment in a terminal.

As to claims 8, 18, 28, 38 and 48, as Liebowitz illustrates in Fig. 2 at Ethernet LAN 24 is bursty, high volume and time sensitive [priority burst] as when the web is being browsed.

As to claims 9, 19, 29, 39 and 49, Liebowitz does not specifically teach using a contention channel for low volume services, but Heath discloses using a contention channel to request **(the implication is the message used to request more bandwidth is considered low- volume and requires low latency)** more bandwidth [col. 1 lines 14-19]. It would have been obvious to a person of ordinary skill at the time of the invention to combine Liebowitz's packet delivery services with Heath's contention channel service in order to have an apparatus that comprises a low volume packet delivery service by accessing a contention channel. The motivation is to manage bandwidth by allowing a low-volume service in a contention channel when there is unused bandwidth assignment in a terminal.

Art Unit: 2661

Allowable Subject Matter

5. Claims 6, 7, 16, 17, 26, 27, 36, 37, 46 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zewdu Habte whose telephone number is 571-272-3115. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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